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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/091,561 08/21/98 PLOUET

J USB95ARCNR

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745 SOUTH 23RD STREET  
SECOND FLOOR  
ARLINGTON VA 22202

HM12/1208

EXAMINER

EWOLDT, G

ART UNIT	PAPER NUMBER
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1644

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DATE MAILED:

12/08/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/091,561

Applicant(s)

Plouet et al.

Examiner

Gerald Ewoldt

Group Art Unit

1644

☒ Responsive to communication(s) filed on Nov 1, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 18-35 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☐ Claim(s) \_\_\_\_\_ is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 18-35 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

☒ Fax Transmittal Form

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

**DETAILED ACTION**

1. The location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Gerald Ewoldt, Art Unit 1644, Group 1640, Technology Center 1600.

2. **Please Note:** In an effort to enhance communication with our customers and reduce processing time, Group 1640 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is 703-305-3704. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Paula Hutzell, Ph.D., Supervisory Patent Examiner at Paula.Hutzell@uspto.gov or 703-308-4310. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

3. Applicant's amendment, filed 11/1/99 (Paper No. 6), is acknowledged.

Claims 1-17 are canceled.

Claims 18-35 are pending.

4. Applicant is reminded to point out in the Specification support for the newly added Claims 18-35.

5. Applicant's election of Species 1 and argument for traversal is rendered moot by the cancellation of the previous claims.

6. Restriction is required under 35 U.S.C. 121 and 372. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. Restriction is required under 35 U.S.C. 121 and 372.

7. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1:

Group I. Claims 18 and 24, drawn to a method of diagnosis using anti-idiotypic VEGF antibodies, classified in Class 424, subclass 131.1.

Group II. Claims 18-19, 21 and 23, drawn to a method of treatment using anti-idiotypic VEGF antibodies for the inhibition of angiogenesis, classified in Class 424, subclass 131.1 and Class 424, subclass 1.49.

Group III. Claims 18, 20, and 22 drawn to a method of treatment using anti-idiotypic VEGF antibodies, for the promotion of angiogenesis, classified in Class 424, subclass 131.1.

Group IV. Claims 25-30 and 32-35, drawn to anti-idiotypic VEGF antibodies classified in Class 530, subclass 387.2.

Group V. Claim 31, drawn to a process of making to an anti-idiotypic VEGF antibody classified in Class 530, subclass 387.2.

8. The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The invention of Group IV was found to have no special technical feature that defined the contribution over the prior art of Plouet et al. (Plouet, J., et al., J. Cell. Biochem., Supp. 18A, pg. 328, XP000602723, Abstract EZ311). Plouet et al. teach an anti-idiotypic VEGF antibody. It is an inherent property of the anti-idiotypic VEGF antibody that it would bind the VEGF receptor (KDR) and exhibit the properties (Claim 26) of an anti-idiotypic VEGF antibody. Additionally, the patentability of product by process claims (Claim 30) is determined by the product itself (M.P.E.P. 2113)

The invention of Group IV was found to have no special technical feature that defined the contribution over the prior art of Hirth (U. S. Patent No.5,942,385) which discloses anti-idiotypic VEGF antibodies and fragments thereof. It is an inherent property of the anti-idiotypic VEGF antibody that it would bind the VEGF receptor (KDR) and exhibit the properties (Claim 26) of an anti-idiotypic VEGF antibody. Additionally, the patentability of product by process claims (Claim 30) is determined by the product itself (M.P.E.P. § 2113).

9. Accordingly, Groups I-V are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept and restriction is proper.

10. Groups I, II, and III are different methods of use. These inventions require different ingredients, process steps, and/or endpoints. Therefore, they are patentably distinct.

11. Groups (IV/ V) and Groups (I/ II/ III) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)).

In the instant case, the products as claimed can be used in a materially different process such as immunopurification procedures or diagnostic or detection assays.

12. Groups V and IV are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (M.P.E.P. § 806.05(f)).

In the instant case the process claimed can be used to make multiple anti-idiotypic antibodies to multiple epitopes and anti-idiotypic antibodies can be made by recombinant methods.

13. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

14. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Ewoldt whose telephone number is (703) 308-9805. The examiner can normally be reached Monday through Friday from 8:30 am to 5:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

Gerald Ewoldt, Ph.D.  
Patent Examiner  
Group 1640  
Technology Center 1600  
December 5, 1999

PHILIP GAMBEL  
PATENT EXAMINER  
~~GROUP 1600~~  
TECH CENTER 1600  
PHILIP GAMBEL  
12/7/99

**Part III: Detailed Office Action**

**Restriction Requirement:**

1. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single  
5 general inventive concept under PCT Rule 13.1.

The species are as follows:

- (1) Anti-idiotypic VEGF antibodies which inhibit angiogenesis (claim 1)
- (2) Anti-idiotypic VEGF antibodies which promote angiogenesis (claim 1)
- (3) Anti-idiotypic VEGF antibodies which are used for diagnosis (claim 1)
- 10 (4) Anti-idiotypic VEGF antibodies which selectively stimulate KDR (claim 4)
- (5) Anti-idiotypic VEGF antibodies which selectively stimulate KDR or flk-1 but not flt (claim  
9)
- (6) Anti-idiotypic antibodies which stimulate angiogenesis (claim 6)
- (7) Anti-idiotypic antibodies which inhibit angiogenesis when associated with a toxin (claim  
15 7)

Applicant is required, in response to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The response must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless  
20 accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election,  
25 applicant must indicate which are readable upon the elected species. MPEP § 809.02(a). Currently no claim is generic.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

Species 1 and 2 are mutually exclusive in nature, and therefore do not share a corresponding technical feature.

Species 3, use for diagnosis, in no way depends upon the ability to inhibit/enhance angiogenesis, and therefore does not share a corresponding technical feature with species 1 or 2.

None of species 1-3 specifically requires stimulation of KDR, and thus those species do not share a corresponding technical feature with species 4 or 5. Species 4 and 5 do not share a corresponding technical feature, as the antibodies of species 4 may stimulate flt, which the antibodies of species 5 cannot, thus the two groups are drawn to different groups of antibodies with different required properties.

Species 6 and 7 do not share a corresponding technical feature with species 1-5 as the antibodies of species 6 and 7 are not required to be anti-idiotypic VEGF antibodies, but rather are generally described as anti-idiotypic without reference to any particular protein. Accordingly, not special technical feature is found.

Finally, species 6 and 7 share no common technical feature, as the two groups have contrary properties.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 37 C.F.R. § 1.48(b) and by the fee required under 37 37 C.F.R. § 1.17(h).

Serial Number 09/091561

Art Unit 1646

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**Advisory Information:**

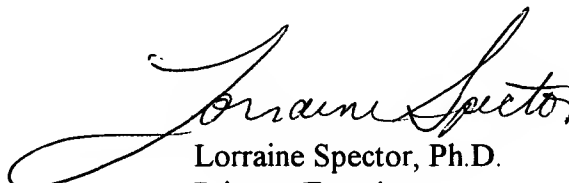
Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Lorraine M. Spector, whose telephone number is (703) 308-1793. Dr. Spector can normally be reached Monday through Friday, 8:00 A.M. to 4:30 P.M.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Paula Hutzell, Ph.D, can be reached at (703)308-4310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist at telephone number (703) 308-0196.

Certain papers related to this application may be submitted to Group 1800 by facsimile transmission. Papers should be faxed to Group 1800 via the PTO Fax Center located in Crystal Mall 1 (CM1). The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 C.F.R. § 1.6(d)). NOTE: If Applicant does submit a paper by fax, the original signed copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

Official papers filed by fax should be directed to (703) 305-4242. Faxed draft or informal communications with the examiner should be directed to (703) 308-0294. Please advise the Examiner at the telephone number above when an informal fax is being transmitted.

  
Lorraine Spector, Ph.D.  
Primary Examiner

LMS  
091561.r  
9/24/99